UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,151	06/08/2005	Giovanni Mogna	HOFF-38315	3249

86378 7590 02/03/2011

Pearne & Gordon LLP
1801 East 9th Street
Suite 1200
Cleveland, OH 44114-3108

EXAMINER	
BADR, HAMID R	

ART UNIT	PAPER NUMBER
1781	

NOTIFICATION DATE	DELIVERY MODE
02/03/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patdocket@pearne.com
dchervenak@pearne.com

Office Action Summary	Application No.	Applicant(s)	
	10/538,151	MOGNA, GIOVANNI	
	Examiner	Art Unit	
	HAMID R. BADR	1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE, 12/16/2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/16/2010 has been entered.

2. The Declaration by Mr. G. Mogna filed 12/16/2010 has been considered. Claims 16-30 are being considered on the merits.

Claim Objections

Claims 23 and 24 are objected to for "milk derivative". However, since claim 24 recites cheese or yogurt, it is suggested to use 'milk product' instead of "milk derivative".

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 30 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 30 is indefinite for "derived from milk". Since "derived" may indicate a compound which is synthesized or extracted from milk, the scope of the claim is not clear. The scope of the claim is not clear because it is not clear whether the dairy

product is a product which simply comprises milk or it is a product which has been synthesized or extracted from milk.

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims16-21, 23-26 and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kratochvil (US 4, 119, 732;hereinafter R1).

9. R1 discloses a process for treating milk comprising adding to the cheese milk, before coagulation treatment, a strain of *Lactobacillus plantarum*. The process is applicable to cheese making whether raw milk, heated milk, pasteurized milk or sterilized milk is used (Abstract and col. 2, lines 30-33).

10. R1 discloses that regular starter cultures comprising *Streptococcus lactis* (i.e. *Lactococcus lactis*) and *Streptococcus cremoris* are used in the cheese making process together with *Lactobacillus plantarum*. (col. 3, lines 10-20)

11. R1 discloses that L. plantarum may be added to the cheese at any stage prior to aging and curing. However, the preferred higher levels of bacteria added with a starter culture are of greater advantage, particularly where the raw milk is not heat treated (col. 3, lines 35-41). Therefore, the recitation of "adding to the milk during its storage, before coagulation treatment, in claim 16, is anticipated by R1.

12. R1 discloses that in selecting the proper strains of *L. plantarum*, only those strains which coagulate reconstituted skim milk (i.e. acid producing) within 24 hrs are selected. (col. 4; line 68 to col. 5; line2)

13. R1 discloses that *Lactobacillus plantarum* may be conveniently dried or frozen, in viable state, by techniques known in the art. (col. 5, line 68 to col. 6; line 2)

14. R1 discloses that *L. plantarum* is added to the milk before coagulation of the milk. (Examples I and II). R1 discloses that approximately 2x10^10 cells of *L. plantarum* are present in the milk (Examples I and II)

15. Despite the fact that applicants have provided specific deposit names (LMG-P-21385 and LMG-P-21389) for the isolated strains disclosed and claimed, this does not provide a patentable distinction over those strains disclosed by R1 as also being a member of the same species (i.e. *Lactobacillus plantarum*); and being added as adjunct culture prior to milk coagulation in the cheese making process; absent any clear and convincing evidence to the contrary. The USPTO does not possess the facilities to test each strain of microorganism. However, even if the strains disclosed by R1 and the claimed strains are not one and the same and there is, in fact, no anticipation, the strains disclosed by R1 would have made the claimed strains obvious to one of ordinary

skill in the art at the time the claimed invention was made in view of the fact that R1discloses members of the same species as that claimed; known to be used as an adjunct culture in the cheese making process. Thus, the claimed invention as a whole was clearly prima facie obvious in the absence of sufficient, clear and convincing evidence to the contrary.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 16, 22, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kratochvil (US 4, 119, 732;hereinafter R1) in view of Reddy et al. (EP 0 312 359; hereinafter R2)

18. The disclosure of R1 is incorporated by reference as outlined above.

19. R1 is silent regarding the addition of the claimed strains to milk before pasteurization.

20. R2 discloses a process wherein cold milk is acidified using acids or bacterial fermentation. The step is called "preconditioning". The preconditioned milk may be stored in a tank or silo or it may be pasteurized immediately. R2 discloses that the preconditioning permits the use of higher pasteurization temperatures (165-190F, 73.9 - 87.8 C) which results in the incorporation of about 15-50% of the whey protein without experiencing decrease in cheese quality (page 6, the first two paragraphs under

Description of the Preferred Embodiment). Thus; it would be obvious to use the acid producing *L. plantarum* of R1 to acidify cold milk as disclosed by R2.

21. In summary, R1 discloses acid producing Lactobacillus plantarum used in cheese making. R2 teaches of preconditioning cold raw milk via fermentation of milk. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to add the acid producing *Lactobacillus plantarum* , disclosed by R1, to cold milk, as disclosed by R2, to acidify the milk (i.e. precondition it), before pasteurization as disclosed by R2. One would do so to precondition the raw milk so that the heat treated milk would yield a higher quality curd, when treated with rennet. Absent any evidence and based on the combined teachings of the cited references, there would be a reasonable expectation of success in applying the claimed strains to raw milk prior to pasteurization before making cheese.

Response to Arguments

Applicants' arguments have been considered. In light of the new ground(s) of rejection, these arguments are moot.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R Badr
Examiner
Art Unit 1781

/Keith D. Hendricks/

Supervisory Patent Examiner, Art Unit 1781